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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,764	12/06/2006	Niaz Irekovich Akishev	290323US41X PCT	8396
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BESLER, CHRISTOPHER JAMES	
			ART UNIT 4176	PAPER NUMBER
			NOTIFICATION DATE 09/14/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/579,764	Applicant(s) AKISHEV ET AL.	
	Examiner CHRISTOPHER BESLER	Art Unit 4176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 1 recites the limitation "the outer skins" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 1 recites the limitation "the core" in line 2. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 1 recites the limitation "their further connection" in lines 2-3. It is unclear what component of the panel is being referred to by the pronoun "their".
5. Claim 1 recites the limitation "the prescribed crimp profile" in line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 1 recites the limitation "the marked-out" in 4. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 1 recites the limitation "the core development zigzag lines" in line 4. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 1 recites the limitation "the sheet blank" in line 5. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 1 recites the limitation "the points of bending lines intersections" in line 5. There is insufficient antecedent basis for this limitation in the claim.

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10. Claim 1 recites the limitation "the holes" in line 6. There is insufficient antecedent basis for this limitation in the claim.

11. Regarding claim 1, the word "means" is preceded by the word(s) "sheet blank bending" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, applicant is unclear as to whether it is his intention to invoke 112 2nd paragraph. Because of this, the reference is interpreted to require that the core panel be bent along a prescribed profile, so as to create a corrugated core.

12. This claim is replete with 112 2nd paragraph issues, making it extremely difficult to discern the metes and bound of this claim. It is suggested to amend this claim to make it conform to the US claim drafting practice. (e.g. use active voice instead of passive voice)

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Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 1 is rejected under 35 U.S.C. 103(a) as obvious over *Weber* (U.S. Patent Number 3,341,395). As to claim 1, *Weber* discloses a panel comprised of 2 outer skin members (figure 2, elements 16 and 17 or column 2, lines 42 - 46) which hold a corrugated core (figure 2, element 18 or column 2, lines 42 - 46). This corrugated core

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is to be bent along predetermined lines (the claimed "marked out"), such that the core is corrugated between the two outer panels (column 2 line 64 – column 3 line 78). *Weber* further discloses forming at least one "large" hole (column 3, lines 22 – 25) into the corrugated core at the point at which the corrugated core and one sandwich panel meet (figure 3, element 38; column 2, lines 55 – 58). *Weber* discloses that the purpose of these holes is to reduce the overall weight, while increasing the strength, of the panel (column 3, lines 27 – 30). Note that applicant gives this same purpose in his disclosure for punching holes in the corrugated core. While *Weber* does not explicitly teach that the diameter of the hole be at least equal to the "maximum sheet blank bending radius," it can be seen in Figure 3 that the diameter of holes 38 are illustrated as being much greater than the bend radius of the blank. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the diameter larger than the "maximum sheet blank bending radius" of the hole because one in the art would have formed holes with the relative dimension illustrated in figure 3 of *Weber* for reducing weight, while increasing strength of the panel. This would obviate the need to run many experiments to achieve the above noted benefits. As for the limitation of forming the holes by punching, *Weber* is silent on how the perforations are formed. However, it would have been obvious in the art to form the perforations by punching as such as is an art recognized effective and yet convenient way for forming holes in a blank.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BESLER whose telephone number is

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(571)270-5331. The examiner can normally be reached on 7:30 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bryant David can be reached on (571) 272-4520. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CB

/Sam Chuan C. Yao/
Supervisory Patent Examiner, Art Unit 4111